

Title (en)
Plasma reactor

Title (de)
Plasmareaktor

Title (fr)
Réacteur à plasma

Publication
EP 1837067 A3 20090415 (EN)

Application
EP 07250597 A 20070214

Priority
JP 2006078625 A 20060322

Abstract (en)
[origin: EP1837067A2] A plasma reactor (100) including a plasma generating electrode (1) which includes a plurality of unit electrodes (2) hierarchically layered at specific intervals, a casing (11) in which the plasma generating electrode (1) is disposed, and a power supply (21) which applies a voltage to the unit electrodes (2), generating plasma in a space (3) formed between the unit electrodes (2) by applying a pulse voltage between the unit electrodes (2) from the power supply (21), and capable of processing exhaust gas introduced into the space (3) through reaction, the plasma reactor (100) further including a light-transmitting section (12) formed in the casing (11) for externally detecting light emitted by the plasma, light detection means (31) capable of detecting light emitted by the plasma through the light-transmitting section (12), and control means (41) for controlling electric energy applied to the unit electrodes (2) depending on intensity of light detected by the light detection means (31).

IPC 8 full level
B01D 53/32 (2006.01); **F01N 3/08** (2006.01)

CPC (source: EP US)
B01D 53/32 (2013.01 - EP US); **F01N 3/0892** (2013.01 - EP US); **F01N 9/00** (2013.01 - EP US); **B01D 2258/012** (2013.01 - EP US); **B01D 2259/818** (2013.01 - EP US); **F01N 3/027** (2013.01 - EP US); **F01N 2240/28** (2013.01 - EP US); **F01N 2330/06** (2013.01 - EP US); **F01N 2330/32** (2013.01 - EP US); **F01N 2510/06** (2013.01 - EP US); **F01N 2560/12** (2013.01 - EP US); **Y02E 30/10** (2013.01 - EP); **Y02T 10/40** (2013.01 - EP US); **Y10S 422/906** (2013.01 - EP)

Citation (search report)

- [Y] WO 0065887 A1 20001102 - BARDOS LADISLAV [SE], et al
- [Y] US 5958258 A 19990928 - ISHIHARA HIROYUKI [JP], et al
- [A] WO 2005005798 A1 20050120 - NGK INSULATORS LTD [JP], et al & EP 1645730 A1 20060412 - NGK INSULATORS LTD [JP], et al
- [A] EP 1394835 A1 20040303 - ST MICROELECTRONICS SRL [IT]
- [A] US 6867859 B1 20050315 - POWELL GARY [US]

Cited by
CN103732872A; CN103443412A; EP2687691A4; EP2687692A4; WO2013023875A1; US9217354B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1837067 A2 20070926; EP 1837067 A3 20090415; EP 1837067 B1 20110119; DE 602007012004 D1 20110303;
JP 2007255255 A 20071004; JP 4619969 B2 20110126; US 2007223641 A1 20070927; US 7508140 B2 20090324

DOCDB simple family (application)
EP 07250597 A 20070214; DE 602007012004 T 20070214; JP 2006078625 A 20060322; US 70420107 A 20070209